

ABSTRACT:

An X-ray examination apparatus includes an X-ray source (1) for emitting an X-ray beam (8) having a central X-ray extending along a central beam line (4). There is also provided an X-ray detector (2) for picking up X-ray images. The X-ray source (1) and the X-ray detector (2) are rotatable together around an axis of rotation (3). The X-ray examination apparatus is provided with a calibration system (6, 7). Calibration images of the calibration phantom (6) are formed from different, preferably opposed directions of the X-ray beam (8). The zero orientation of the X-ray source (1) with the X-ray detector (2) is derived from differences in positions of the same aspect of the calibration phantom in the respective calibration images. The central beam line (4) extends perpendicularly to the axis of rotation (3) in the zero orientation.

Fig. 2